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(54) Title: FUNCTIONAL ROLE OF ADRENOMEDULLIN (AM) AND THE GENE-RELATED PRODUCT (PAMP) IN HUMAN PATHOLOGY AND PHYSIOLOGY

(57) Abstract

The methods of the present invention demonstrate that adrenomedullin (AM) is expressed in human cancer cell lines of diverse origin and functions as a universal autocrine growth factor driving neoplastic proliferation. The present invention provides for AM peptides and AM antibodies useful in therapeutic, pharmacologic and physiologic compositions. The present invention additionally provides for methods of diagnosis, treatment and prevention of disease utilizing compositions comprising the AM peptides and antibodies of the present invention. The methods of the present invention also provide for experimental models for use in identifying the role of AM in pancreatic physiology. The methods pertaining to rat isolated islets have shown that AM inhibits insulin secretion in a dose-dependent manner. The monoclonal antibody MoAb-G6, which neutralizes AM bioactivity, was shown by the methods of the present invention to increase insulin release fivefold, an effect that was reversed by the addition of synthetic AM.

